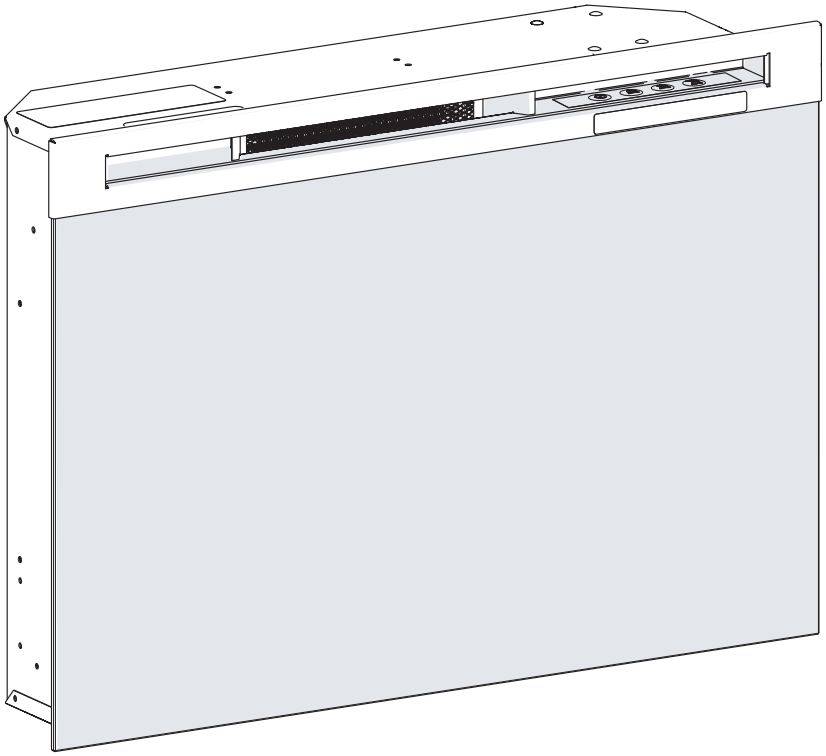
Dimplex®

Better solutions through innovation

Service Manual



Model Number:
DF2524L
DF2524G

UL Part Number
6908921359
6908921459

IMPORTANT SAFETY INFORMATION: Always read this manual first before attempting to service this fireplace. For your safety, always comply with all warnings and safety instructions contained in this manual to prevent personal injury or property damage.

REV	PCN	DATE
00	-	11-JUL-14
01	14284	16-SEP-14

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7400820100R01

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Always use a qualified technician or service agency to repair this fireplace.

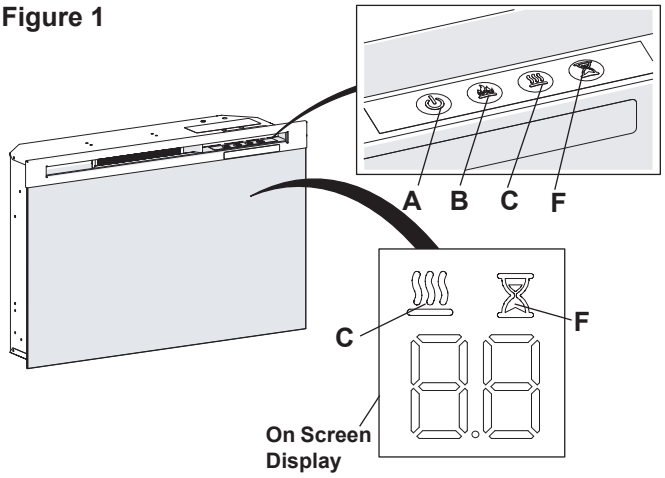
! NOTE: Procedures and techniques that are considered important enough to emphasize.

⚠ **CAUTION:** Procedures and techniques which, if not carefully followed, will result in damage to the equipment.

⚠ **WARNING:** Procedures and techniques which, if not carefully followed, will expose the user to the risk of fire, serious injury, or death.

OPERATION

Figure 1



The unit can be controlled by either the manual controls which are located on the upper right of the fireplace or the remote (Figure 1 & 2).

The fireplace is supplied with an IR multifunction remote control.

! NOTE: To operate correctly, the remote control must be pointed towards the front of the unit.

A. ⏻ Standby

Turns the unit On and Off.

→ Activated by pressing the Standby button on the remote or the unit.

- The unit will turn on with the same functions that it was set to when it was turned Off and the intake temperature will be indicated on the On Screen Display.

! NOTE: When any button is pressed the intake temperature will be displayed on the On Screen Display for 5 seconds.

B. Flame Effects

The Flames can be turned off by pressing the button, then again to turn back on.

→ Activated by pressing the button on the remote or the unit.

C. Heat ON/OFF

Turns the heater function On and Off based on the thermostat setpoint.

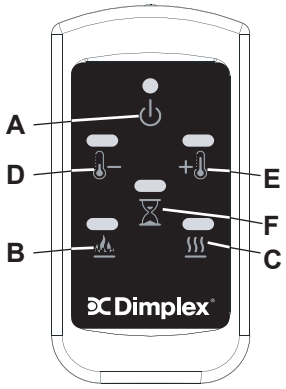
→ Activated by pressing the button on the unit or the remote.

- Indicated by the icon and the intake temperature being displayed on the On Screen Display, for 5 seconds before turning off.

! NOTE: The unit can be operated in ***Heat Only Mode***. When the unit is only running with the heater, the icon and the intake temperature will continuously be displayed on the On Screen Display.

! NOTE: The heater may emit a slight, harmless odor when first used. This odor is a normal condition caused by initial heating of internal heater parts and will not occur again.

Figure 2



D & E. Thermostat Controls

Adjusts the temperature set point to your individual requirements. Once the desired set temperature is reached the heater will turn off. The heater will cycle on and off to maintain the desired set temperature. The default temperature setting is 72°F (22°C).

→ Adjusted by pressing the to decrease the setpoint and the to increase the setpoint on the remote.

- The On Screen Display will indicate the temperature setpoint as it is adjusted.

! NOTE: Holding the button down on the unit will change the temperature from °C to °F, or vice versa.

Disable Heat

If desired, depending on the season, the heater on the unit can be disabled. The unit will operate in the same fashion, with the remainder of the controls.

Pressing the and buttons on the unit at the same time and holding for 2 seconds will disable and enable the heater.

! NOTE: When the heater has been disabled and either the or the is pressed the On Screen Display will indicate "--".

F. Sleep Timer

The Sleep Timer can be set to automatically shut off the fireplace after a preset time (from 30 minutes to 8 hours).

→ To set the timer press the timer button on either the remote or the unit, repeatedly, until the desired time is displayed.

- The On Screen Display will display the different times as it is adjusted. Once the timer has begun, pressing the button will display the time remaining before the unit turns Off.

! NOTE: The Sleep Timer can be cancelled at any time by pressing the button repeatedly until the sleep timer displays nothing.

Resetting the Temperature Cutoff Switch

Should the heater overheat, an automatic cut out will turn the heater off and it will not come back on without being

reset. It can be reset by unplugging the unit and waiting 5 minutes before plugging the unit back in.

⚠ **CAUTION:** If you need to continuously reset the heater, unplug the unit and call technical support at 1-888-346-7539.

Remote Control Battery Replacement

1. On the back of the remote control, turn the battery cover counter-clockwise to remove the cover.
2. Correctly install one 3 Volt (CR2032) battery in the battery holder.
3. Close the battery cover.

Battery must be recycled or disposed of properly. Check with your Local Authority or Retailer for recycling advice in your area

MAINTENANCE

⚠ **WARNING:** Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or damage to persons.

Glass Cleaning

The glass is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the front glass panel may collect dust particles; these can be removed by dusting lightly with a clean dry cloth.

To remove fingerprints or other marks, the front glass panel can be cleaned with a damp cloth. The front glass panel should be completely dried with a lint free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners or spray liquids on the clear door surface.

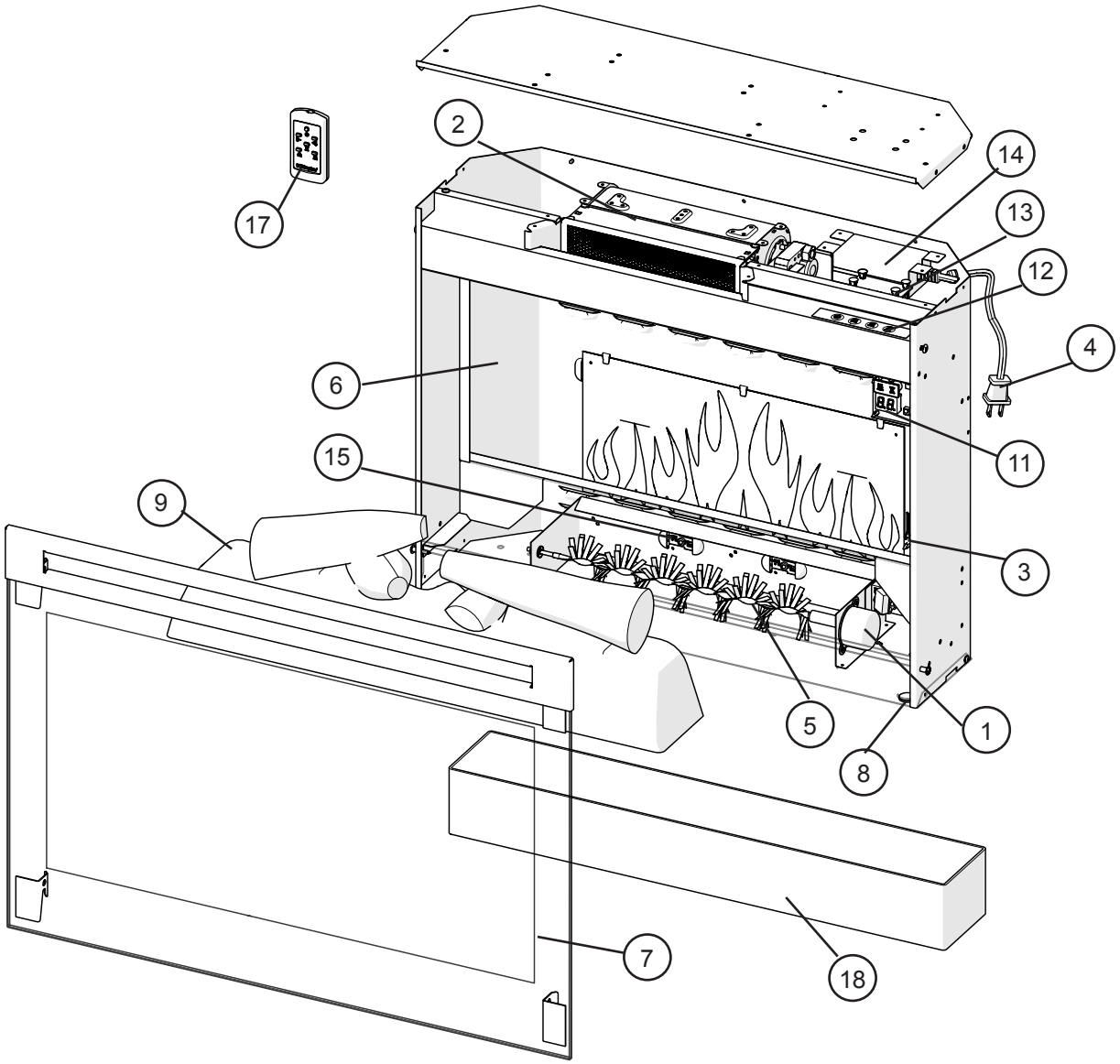
Compact Fireplace Surface Cleaning

Use warm water only to clean painted surfaces of the Compact Fireplace. Do not use abrasive cleaners.

Servicing

Except for light bulb replacement and cleaning described above, an authorized service representative should perform any other servicing.

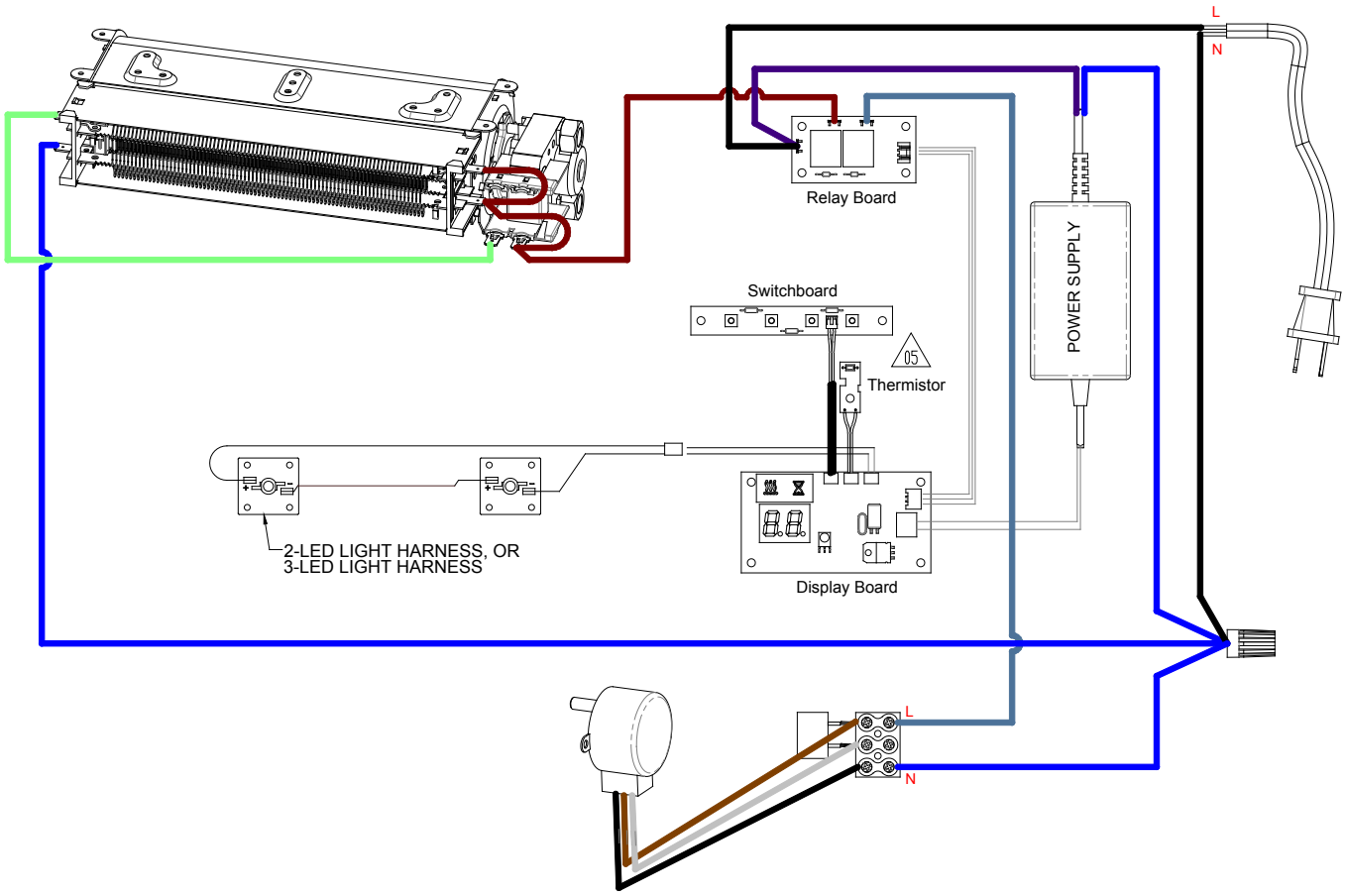
EXPLODED PARTS DIAGRAM



REPLACEMENT PARTS

1. Flicker Motor 2000220100RP
2. Heater Assembly (with Cutout) 2203610100RP
3. Thermistor 3001380100RP
4. Cord Set 4100090204RP
5. Flicker Rod 5902620200RP
6. Partially Reflective Panel 5902580200RP
7. Front Glass 5902640100RP
8. Felt Feet Pads (set of 4) 8600140101RP
9. Log Set Assembly 0440590400RP
10. Glass Media 1400070100RP
11. Display/ Control Board
    Units with Logs 3001350200RP
    Units with Glass Media 3001350300RP
12. Switchboard 3001370100RP
13. Relay Board 3001360100RP
14. AC/DC Adapter 2100250100RP
15. LED Light Assembly (2 LED's) 3001390100RP
16. LED Light Assembly (3 LED's) 3001390200RP
17. Remote Control 6700510200RP
18. Media Tray 0441730100RP

WIRING DIAGRAM



SWITCHBOARD REPLACEMENT

Tools Required: Phillips Head Screwdriver
Flat Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

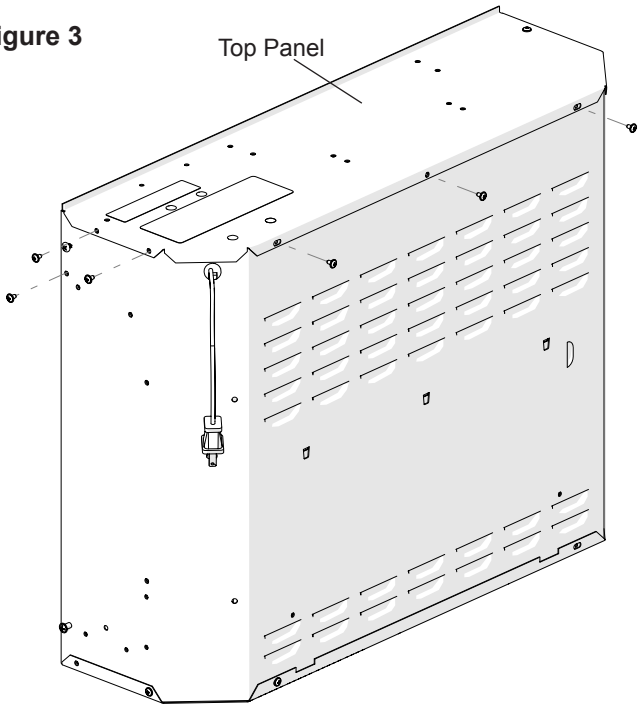
⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the Switchboard and disconnect the wiring connections noting their original locations.

! **NOTE:** A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Remove the hardware securing the board to the unit.
9. Properly orient and install the switchboard and connect all of the wiring.
10. Reassemble in the reverse order as above.

Figure 3



RELAY BOARD REPLACEMENT

Tools Required: Phillips Head Screwdriver
Flat Head Screwdriver
Needle Nose Pliers

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

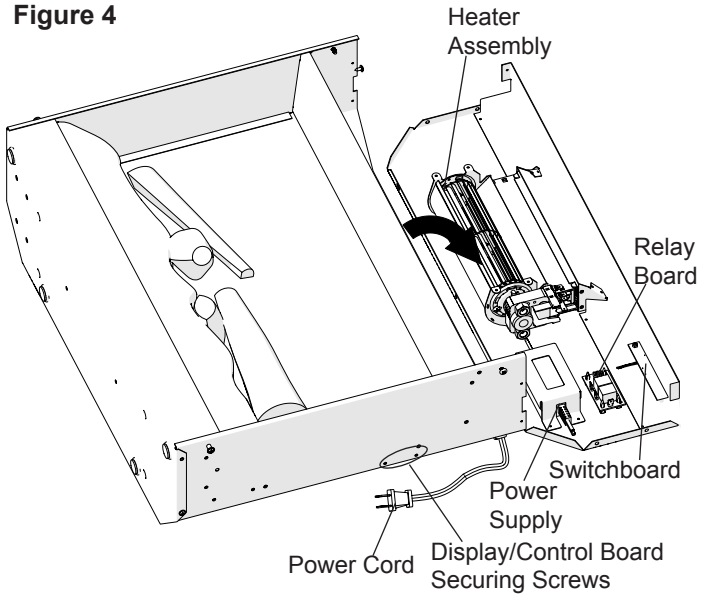
⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the relay board and disconnect the wiring connections noting their original locations.

! **NOTE:** A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Release the relay board from the top panel by using needle nose pliers to depress the tab on the mounting standoffs and gently lift the board off.
9. Properly orient and insert the new board and connect all of the wiring.
10. Reassemble in the reverse order as above.

Figure 4



AC/DC ADAPTER REPLACEMENT

Tools Required: Phillips Head Screwdriver
Flat Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the adapter and disconnect the wiring connections noting their original locations.
8. There is one connection located on the display/control board that requires the board to be removed. This can be done by removing the two screws on the right hand side of the unit, reaching between the partially reflective panel and the back of the unit, to remove the display/control board to remove the connection and replace it with the new one.
9. Reinstall the display/control board.
10. Remove the adapter from the top panel by removing the four screws securing it to the top panel.
11. Properly orient and insert the new adapter and connect all of the wiring.
12. Reassemble in the reverse order as above.

DISPLAY/CONTROL BOARD REPLACEMENT

Tools Required: Phillips Head Screwdriver
Flat Head Screwdriver
Needle Nose Pliers

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the display/control board behind the partially reflective panel and remove the two screws that attach it to the unit.
8. Disconnect the wiring connections noting their original locations.
9. Release the display/control board from the support panel by using needle nose pliers to depress the tab on the mounting standoffs and gently lift the board off.
10. Properly orient and insert the new board and connect all of the wiring.
11. Reassemble in the reverse order as above.

HEATER ASSEMBLY REPLACEMENT

Tools Required: Phillips Head Screwdriver
Flat Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the heater assembly and disconnect the wiring connections noting their original locations.

! **NOTE:** A flat head screwdriver can be used to gently pry between the end of the connector and the switch to release the wires.

8. Remove the 4 screws that secure the top panel to the heater assembly
9. Properly orient and install the new assembly and connect all of the wiring.

WARNING: Ensure wires do not come in contact with moving parts by securing wires in wiring tie wraps.

10. Reassemble in the reverse order as above.

POWER CORD REPLACEMENT

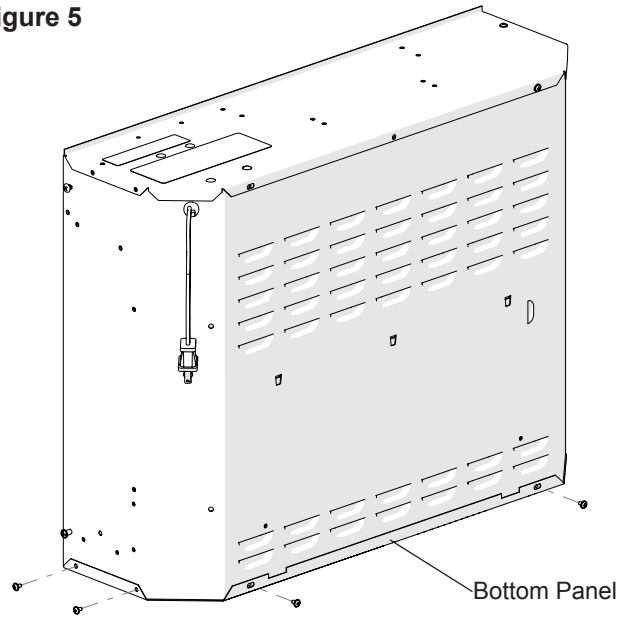
Tools Required: Phillips Head Screwdriver

CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the top edge and the one at the top of the glass retaining bracket on both sides. (Figure 3)
5. Lay the Compact Fireplace on its back.
6. Gently open the top panel, laying it on the work surface so that all of the components can easily be seen. (Figure 4)
7. Locate the power cord and disconnect the wiring connections noting their original locations.
8. With needle nose pliers, grasp the power cord strain relief grommet from inside the back of the bottom panel and push while twisting to remove.
9. Install the new power cord.
10. Reassemble in the reverse order as above.

Figure 5



FLICKER MOTOR & FLICKER ROD REPLACEMENT

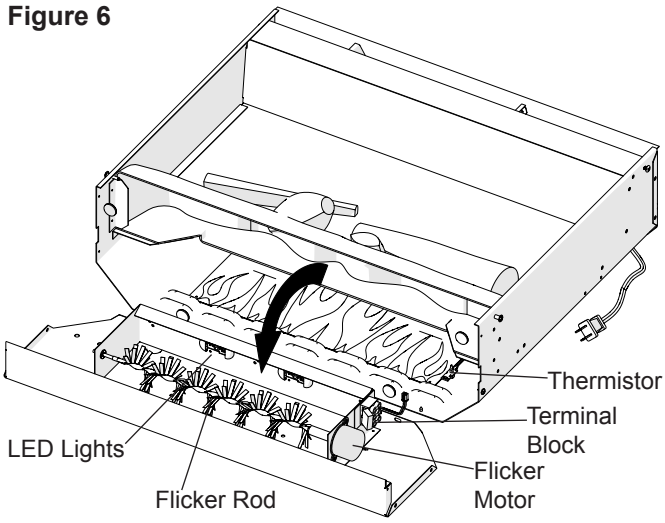
Tools Required: Phillips Head Screwdriver

CAUTION: If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

WARNING: Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit, the two on either side along the bottom edge. (Figure 5)
5. Lay the Compact Fireplace on its back.
6. Gently open the bottom panel, laying it on the work surface so that all of the components can easily be seen. (Figure 6)
7. Locate the flicker motor and flicker rod.
8. Locate and disconnect the 3 motor assembly wires going to the terminal block. (Figure 6)
9. Remove the 2 motor mounting screws.
10. Separate the motor from the flicker connector and remove.
11. Slide the flicker rod out of the snap-in bushing and remove.
12. Reassemble in the reverse order as above.

Figure 6



LED LIGHT ASSEMBLY REPLACEMENT

Tools Required: Phillips Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit and the two on either side along the bottom edge. (Figure 5)
5. Lay the Compact Fireplace on its back.
6. Gently open the bottom panel, laying it on the work surface so that all of the components can easily be seen. (Figure 6)
7. Locate the LED lights along the back. Each light is secured with four screws and there is a light filter that is sandwiched between the light assembly and the sheet metal bracket.

! **NOTE:** New light filters are not provided with replacement lights and will need to be reinstalled in the original locations.

8. There is one connection located on the display/control board that requires the board to be removed. This can be done by removing the two screws on the right hand side of the unit, reaching between the partially reflective panel and the back of the unit, to remove the display/control board to remove the connection and replace it with the new one.
9. Reinstall the display/control board.
10. Properly orient and install the new LED lights and connect all of the wiring.
11. Reassemble in the reverse order as above.

LOG SET ASSEMBLY REPLACEMENT

Tools Required: Phillips Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the two screws that secure the front glass retaining bracket to the unit. (Figure 5)
5. Remove the front glass and set aside in a safe place.
6. Remove the two screws on each side of the firebox that secure the log set to the outside panels.
7. Pull the front edge of the plastic Ember Bed or plastic grate up and forward until the rear tab releases from the ledge located at the bottom of the Partially Reflective Panel. (Figure 7)

! **IMPORTANT:** Only handle the Log Set by the Ember Bed.

! **NOTE:** Log Set fits tightly into firebox, some force may be necessary to remove.

8. Reassemble in the reverse order as above.

PARTIALLY REFLECTIVE PANEL REPLACEMENT

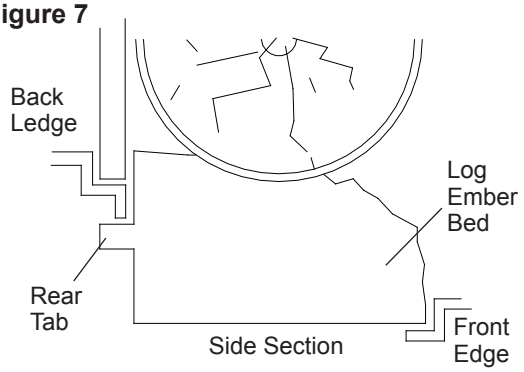
Tools Required: Phillips Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

⚠ **WARNING:** Disconnect power before attempting any maintenance to reduce the risk of electric shock or damage to persons.

1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit and the two on either side along the bottom edge. (Figure 5)
5. Lay the Compact Fireplace on its back.
6. Gently open the bottom panel, laying it on the work surface so that all of the components can easily be seen. (Figure 6)
7. Remove the two screws on each side that secure the partially reflective support bracket to the firebox.
8. Remove the partially reflective support bracket.
9. Remove the partially reflective panel by sliding it out of the side channels towards the bottom.
10. Reassemble in the reverse order as above.

Figure 7



THERMISTOR REPLACEMENT

Tools Required: Phillips Head Screwdriver

⚠ **CAUTION:** If unit was operating prior to servicing allow at least 10 minutes for lights, heating elements and top panel to cool off to avoid accidental burning of skin.

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1. Unplug the unit from power outlet.
2. Remove the front glass and set aside in a safe place.
3. Remove the firebox from the back of the mantel by removing the retaining screws which secure the firebox brackets to the mantel.
4. Remove the three screws along the back of the unit and the two on either side along the bottom edge. (Figure 5)
5. Lay the Compact Fireplace on its back.
6. Gently open the bottom panel, laying it on the work surface so that all of the components can easily be seen. (Figure 6)
7. Remove the two screws on each side that secure the partially reflective support bracket to the firebox.
8. Remove the partially reflective support bracket.
9. Remove the partially reflective panel by sliding it out of the side channels towards the bottom.
10. Locate and release the thermistor from the back panel by using needle nose pliers to depress the tab on the mounting standoffs and gently lift the board off.
11. There is one connection located on the display/control board that may require the board to be removed. This can be done by removing the two screws on the right hand side of the unit to remove the display/control board to remove the connection and replace it with the new one.
12. Install the new thermistor.
13. Reassemble in the reverse order as above.

TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION	PART NUMBER
General			
Circuit breaker trips or fuse blows when unit is turned on	Short in unit wiring.	Trace wiring in unit.	
	Improper circuit current rating	Additional appliances may exceed the current rating of the circuit breaker or fuse. Plug unit into another outlet or install unit on a dedicated 15 amp circuit.	
Lights dim in room while the unit is on	Unit is drawing close to circuit current rating	Move the unit to another outlet or install unit on a dedicated 15 amp circuit	
Power cord gets warm	Normal Operation	The power cord may get slightly warm to the touch when the heater is on	
	Defective power cord	Replace power cord if cord gets hot to the touch.	4100090204RP
Appearance			
Fireplace does not turn on with manual controls	Improper operation	Refer to Operation Section	
	No incoming voltage from the electrical wall socket	Check Fuse/Breaker Panel	
	Loose wiring	Check wiring connections	
	Defective switchboard	Replace the switchboard	3001370100RP
	Defective display/control board	Replace the display/control board	Log 3001350200RP Glass 3001350300RP
	Defective relay board	Replace the relay board	3001360100RP
	Defective AC/DC adapter	Replace the AC/DC adapter	2100250100RP
Fireplace does not turn on with the Remote Control	Improper operation	Refer to Operation Section	
	The batteries in the remote control are dead.	Install new battery into the remote control.	
	Defective display/control board	Replace the display/control board	Log 3001350200RP Glass 3001350300RP
Display has a “PF” showing	Loose connection of the thermistor	Check wiring connection	
	Defective thermistor	Replace the thermistor	3001380100RP
Flame Frozen	Loose wiring	Check wiring connections	
	Defective Flicker Motor	Replace Flicker Motor	2000220100RP
Flame is not visible	Loose wiring	Check wiring connections	
	LED light assembly is not working	Replace LED light assembly	Log 3001390100RP Glass 3001390200RP
	Defective display/control board	Replace the display/control board	Log 3001350200RP Glass 3001350300RP
Flame Shudder	Defective Flicker Motor	Replace Flicker Motor	2000220100RP
Light leaking around the log set (if applicable)	Log set not positioned properly	Check log set for proper fit	

PROBLEM	CAUSE	SOLUTION	
Heater			
Heater is not turning off	Improper operation	Refer to Operation Section	
	Defective switchboard	Replace switchboard	3001370100RP
	Defective thermistor	Replace thermistor	3001380100RP
	Defective relay board	Replace the relay board	3001360100RP
	Defective display/control board	Replace the display/control board	Log 3001350200RP Glass 3001350300RP
Heater is not turning on, but flame effect is still functioning	Improper operation	Refer to Operation Section	
	Loose wiring	Trace wiring in unit	
	Defective switchboard	Replace switchboard	3001370100RP
	Defective heater assembly	Replace heater assembly	2203610100RP
	Defective display/control board	Replace the display/control board	Log 3001350200RP Glass 3001350300RP
Heater is turning off after a couple of minutes of operation	Build up of dirt/dust in Heater Assembly	Ensure that exterior intake louvers and fire-box cavity are free of dirt/dust.	
	Defective heater assembly	Replace heater assembly	2203610100RP
Heater emits an odor	Normal Operation	Normal operation is when the heater emits an odor for a brief period after the heater is initially turned on. The heater is burning off any dust accumulated during manufacturing or operation.	
	Defective heater assembly	Replace heater assembly	2203610100RP
Heating element is glowing red	Normal Operation	Small glowing sections of the element are considered normal.	
	Defective heater assembly	If larger glowing sections are causing the heater to trip the thermal cutout, unplug unit, discontinue use and replace heater assembly.	2203610100RP
Heater fan runs continuously	Defective Heater On/Off Switch	Replace Heater On/Off Switch	
Noise			
Excessive noise with the heater on	Dirty Heater Assembly	Ensure that exterior intake louvers and fire-box cavity are free of dirt/dust.	
	Defective heater assembly	Replace heater assembly	2203610100RP
Grinding or excessive noise with the heater off	Flicker rod hitting or rubbing against internal components	Ensure rod is straight and mounted properly in the bracket, spinning freely away from other components. Replace if necessary.	
	Defective Flicker Motor	Replace Flicker Motor	2000220100RP